

(FILE 'HOME' ENTERED AT 22:53:03 ON 08 JUL 2004)

FILE 'REGISTRY' ENTERED AT 22:53:09 ON 08 JUL 2004

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 129 S L1 FULL
L5 80 S L2 FULL
L6 528 S L3 FULL

FILE 'CAPLUS' ENTERED AT 22:54:25 ON 08 JUL 2004

L7 34909 S PHOTORESIST OR RESIST COMPOSITION
L8 4 S L4 AND L7
L9 2 S L5 AND L7
L10 4 S L6 AND L7
L11 2 S L8 NOT L9
L12 0 S L9 NOT L8

=> s l10 not l8

L13 0 L10 NOT L8

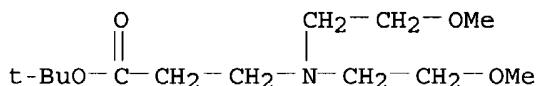
L8 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:955415 CAPLUS
 DN 138:47300
 TI Nitrogen-containing basic compound, resist material, and method of patterning
 IN Hatakeyama, Jun; Watanabe, Takeshi; Nagata, Takashi; Maeda, Kazuki; Nishi, Tsunehiro
 PA Shin-Etsu Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 30 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002363148	A2	20021218	JP 2001-164044	20010531
PRAI JP 2001-164044		20010531		
OS MARPAT 138:47300				

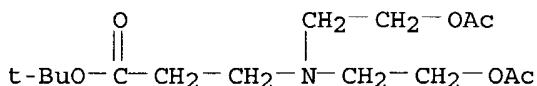
AB The N-containing basic compound is represented by (R2)bN(R1COOCRpRqRr)a (R1 = C1-4 alkylene; R2 = H, C1-20 alkyl; Rp, Rq, Rr = C1-20 hydrocarbon which may form ring; a = 1, 2, 3; b = 0, 1, 2; and a + b = 3). The resist material containing the basic compound is also claimed. The patterning process using a high energy ray ≤ 300 nm or an electron beam is also claimed. An addition of the basic compound in the resist material provided a broader focus margin and a high contrast.

IT 478407-85-1P 478407-88-4P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (nitrogen-containing basic compound for resist material)

RN 478407-85-1 CAPLUS
 CN β -Alanine, N,N-bis(2-methoxyethyl)-, 1,1-dimethylethyl ester (9CI)
 (CA INDEX NAME)



RN 478407-88-4 CAPLUS
 CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:831831 CAPLUS
 DN 137:325160
 TI Preparation of novel tertiary amine compounds having an ester structure as additives for chemical amplification resists
 IN Watanabe, Takeru; Hasegawa, Koji; Kinsho, Takeshi; Hatakeyama, Jun
 PA Shin-Etsu Chemical Co., Ltd., Japan
 SO Eur. Pat. Appl., 31 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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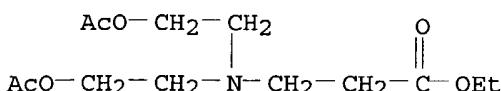
PI EP 1253138 A2 20021030 EP 2002-252827 20020423
 EP 1253138 A3 20030924
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2002193622 A1 20021219 US 2002-127120 20020422
 JP 2003012621 A2 20030115 JP 2002-120468 20020423
 PRAI JP 2001-123927 A 20010423
 OS MARPAT 137:325160
 AB The invention provides novel and useful ester group-containing tertiary amine compds. ($R_1OCH_2CH_2$) n N(CH $2CH_2CO_2R_2$) $3-n$ [n is 1 or 2; R_1 , R_2 = (cyclo)alkyl groups which may contain an ether, carbonyl or carbonyloxy group] which, when used as additives in chemical amplification photolithog., can yield photoresists having a high resolution and an excellent focus margin. Thus, a mixture of 10.5 g each Et acrylate and diethanolamine was allowed to stand 20 h at 20-30 °C, 25.6 g triethylamine, 100 mg 4-dimethylaminopyridine, 100 g THF, and 22.4 g of acetic anhydride were added and the mixture stirred for 10 h to afford 95 % (AcOCH $2CH_2$)NCH $2CH_2CO_2Et$. The photoresists prepared by adding the ester group-containing tertiary amine compds. of the invention have a much wider focus margin, as compared with conventional photoresists.

IT 350684-62-7P 350684-66-1P 350684-69-4P
 350684-73-0P 350684-75-2P 350684-79-6P
 350684-80-9P 350684-81-0P 473713-58-5P
 473713-59-6P 473713-60-9P 473713-61-0P
 473713-62-1P 473713-64-3P 473713-65-4P
 473713-67-6P 473713-68-7P 473713-69-8P
 473713-70-1P 473713-71-2P 473713-72-3P
 473713-73-4P 473713-74-5P 473713-75-6P
 473713-76-7P 473713-77-8P 473713-78-9P
 473713-79-0P 473713-80-3P 473713-81-4P
 473713-82-5P 473713-83-6P 473713-84-7P
 473713-85-8P 473713-86-9P 473713-87-0P
 473713-89-2P 473713-90-5P 473713-91-6P
 473713-92-7P 473713-93-8P 473713-94-9P
 473713-95-0P 473713-96-1P 473713-97-2P
 473713-98-3P 473713-99-4P 473714-00-0P
 473714-01-1P 473714-02-2P 473714-25-9P

RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (preparation of acrylate-(di)ethanolamine adducts as additives for chemical amplification resists)

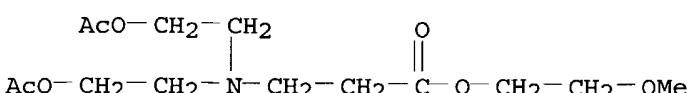
RN 350684-62-7 CAPPLUS

CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 350684-66-1 CAPPLUS

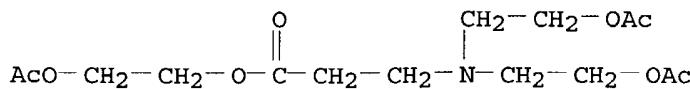
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 2-methoxyethyl ester (9CI) (CA INDEX NAME)



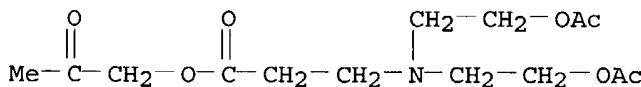
RN 350684-69-4 CAPPLUS

CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 2-(acetyloxy)ethyl ester

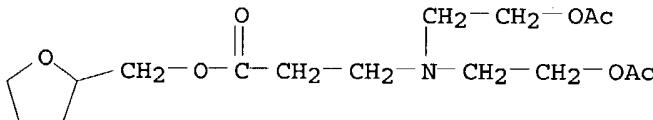
(9CI) (CA INDEX NAME)



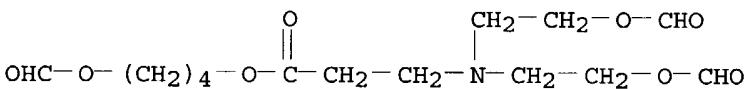
RN 350684-73-0 CAPLUS
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 2-oxopropyl ester (9CI) (CA INDEX NAME)



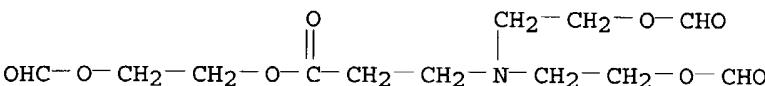
RN 350684-75-2 CAPLUS
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, (tetrahydro-2-furanyl)methyl ester (9CI) (CA INDEX NAME)



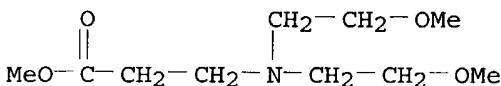
RN 350684-79-6 CAPLUS
CN β -Alanine, N,N-bis[2-(formyloxy)ethyl]-, 4-(formyloxy)butyl ester (9CI) (CA INDEX NAME)



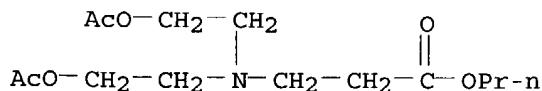
RN 350684-80-9 CAPLUS
CN β -Alanine, N,N-bis[2-(formyloxy)ethyl]-, 2-(formyloxy)ethyl ester (9CI) (CA INDEX NAME)



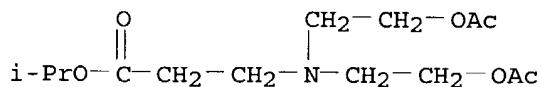
RN 350684-81-0 CAPLUS
CN β -Alanine, N,N-bis(2-methoxyethyl)-, methyl ester (9CI) (CA INDEX NAME)



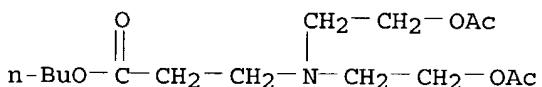
RN 473713-58-5 CAPLUS
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, propyl ester (9CI) (CA INDEX NAME)



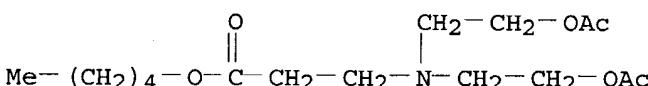
RN 473713-59-6 CAPLUS
 CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 1-methylethyl ester (9CI)
 (CA INDEX NAME)



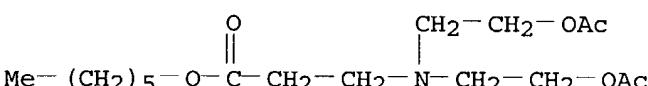
RN 473713-60-9 CAPLUS
 CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, butyl ester (9CI) (CA INDEX NAME)



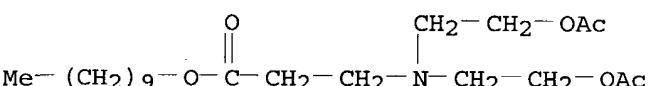
RN 473713-61-0 CAPLUS
 CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, pentyl ester (9CI) (CA INDEX NAME)



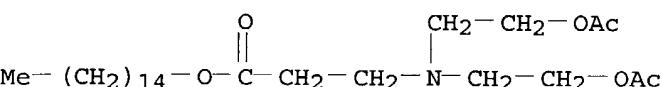
RN 473713-62-1 CAPLUS
 CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, hexyl ester (9CI) (CA INDEX NAME)



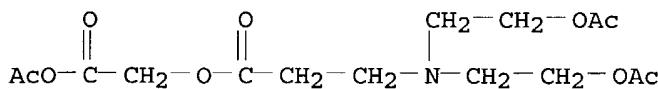
RN 473713-64-3 CAPLUS
 CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, decyl ester (9CI) (CA INDEX NAME)



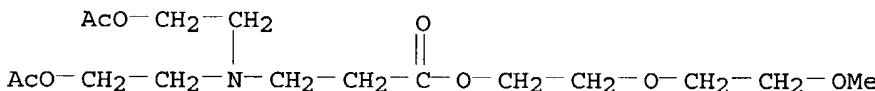
RN 473713-65-4 CAPLUS
 CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, pentadecyl ester (9CI) (CA INDEX NAME)



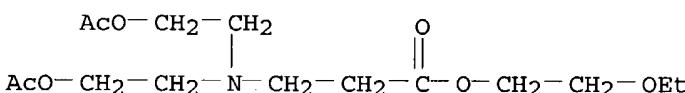
RN 473713-67-6 CAPLUS
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 2-(acetyloxy)-2-oxoethyl ester (9CI) (CA INDEX NAME)



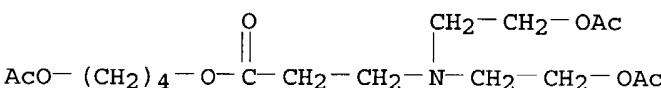
RN 473713-68-7 CAPLUS
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 2-(2-methoxyethoxy)ethyl ester (9CI) (CA INDEX NAME)



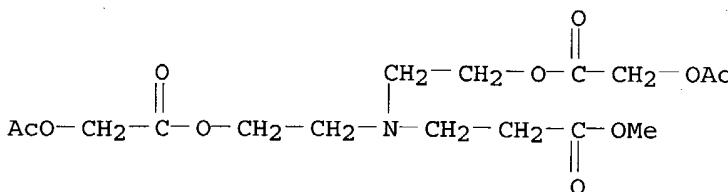
RN 473713-69-8 CAPLUS
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 2-ethoxyethyl ester (9CI) (CA INDEX NAME)



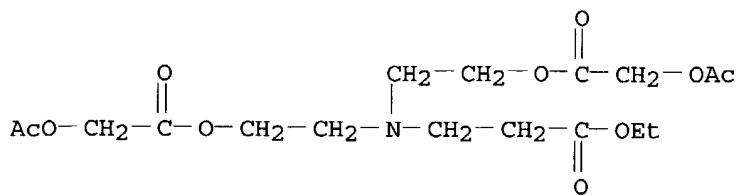
RN 473713-70-1 CAPLUS
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 4-(acetyloxy)butyl ester (9CI) (CA INDEX NAME)



RN 473713-71-2 CAPLUS
CN β -Alanine, N,N-bis[2-[(acetyloxy)acetyl]oxy]ethyl-, methyl ester (9CI) (CA INDEX NAME)

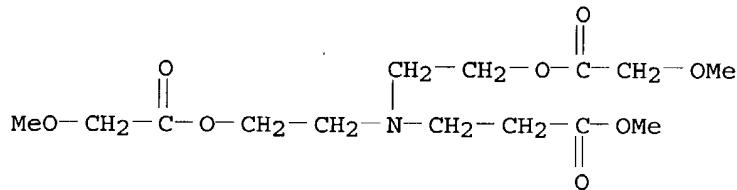


RN 473713-72-3 CAPLUS
CN β -Alanine, N,N-bis[2-[(acetyloxy)acetyl]oxy]ethyl-, ethyl ester (9CI) (CA INDEX NAME)



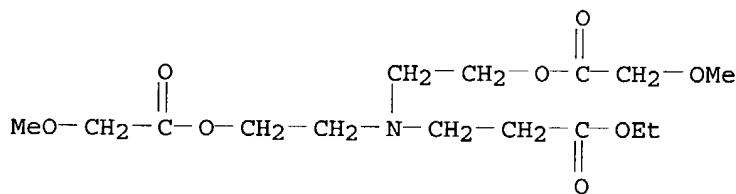
RN 473713-73-4 CAPLUS

CN β -Alanine, N,N-bis[2-[(methoxyacetyl)oxy]ethyl]-, methyl ester (9CI)
(CA INDEX NAME)



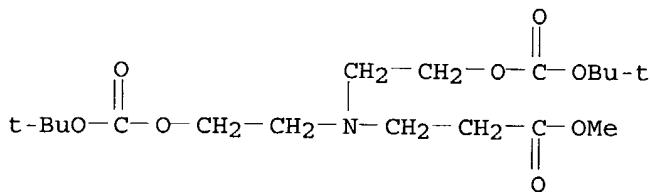
RN 473713-74-5 CAPLUS

CN β -Alanine, N,N-bis[2-[(methoxyacetyl)oxy]ethyl]-, ethyl ester (9CI)
(CA INDEX NAME)



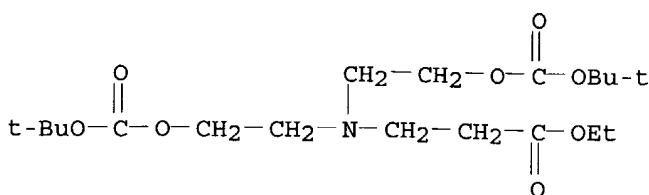
RN 473713-75-6 CAPLUS

CN 2,8,10-Trioxa-5-azadodecanoic acid, 5-(3-methoxy-3-oxopropyl)-11,11-dimethyl-9-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

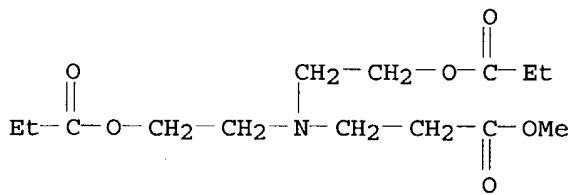


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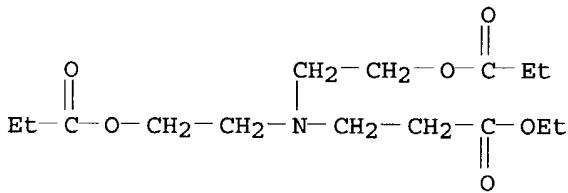
CN 2,8,10-Trioxa-5-azadodecanoic acid, 5-(3-ethoxy-3-oxopropyl)-11,11-dimethyl-9-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



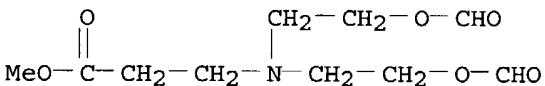
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CN β -Alanine, N,N-bis[2-(1-oxopropoxy)ethyl]-, methyl ester (9CI) (CA INDEX NAME)



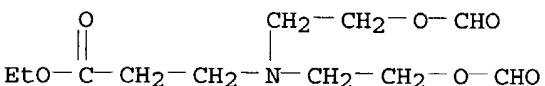
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CN β -Alanine, N,N-bis[2-(1-oxopropoxy)ethyl]-, ethyl ester (9CI) (CA INDEX NAME)



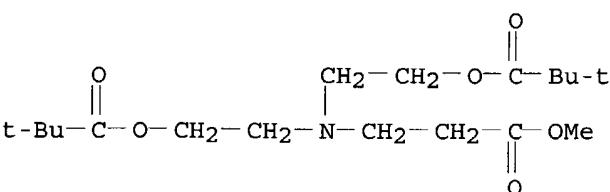
RN 473713-79-0 CAPLUS
CN β -Alanine, N,N-bis[2-(formyloxy)ethyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 473713-80-3 CAPLUS
CN β -Alanine, N,N-bis[2-(formyloxy)ethyl]-, ethyl ester (9CI) (CA INDEX NAME)

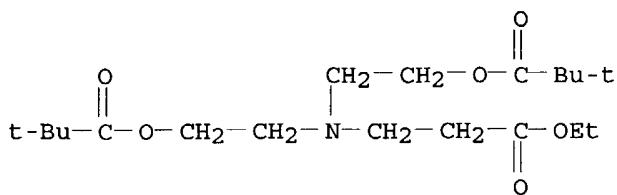


RN 473713-81-4 CAPLUS
CN β -Alanine, N,N-bis[2-(2,2-dimethyl-1-oxopropoxy)ethyl]-, methyl ester (9CI) (CA INDEX NAME)



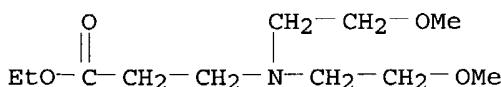
RN 473713-82-5 CAPLUS
CN β -Alanine, N,N-bis[2-(2,2-dimethyl-1-oxopropoxy)ethyl]-, ethyl ester

(9CI) (CA INDEX NAME)



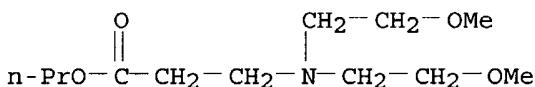
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CN β -Alanine, N,N-bis(2-methoxyethyl)-, ethyl ester (9CI) (CA INDEX NAME)



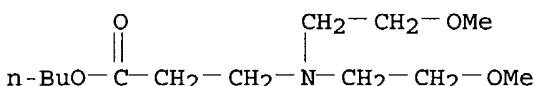
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CN β -Alanine, N,N-bis(2-methoxyethyl)-, propyl ester (9CI) (CA INDEX NAME)



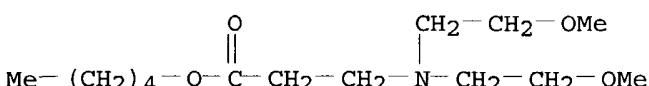
RN 473713-85-8 CAPLUS

CN β -Alanine, N,N-bis(2-methoxyethyl)-, butyl ester (9CI) (CA INDEX NAME)



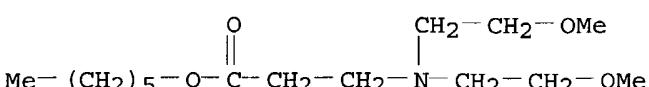
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CN β -Alanine, N,N-bis(2-methoxyethyl)-, pentyl ester (9CI) (CA INDEX NAME)



RN 473713-87-0 CAPLUS

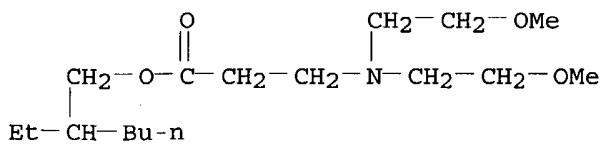
CN β -Alanine, N,N-bis(2-methoxyethyl)-, hexyl ester (9CI) (CA INDEX NAME)



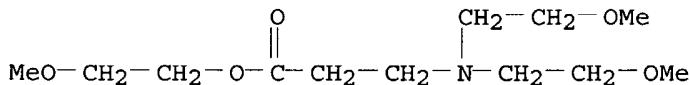
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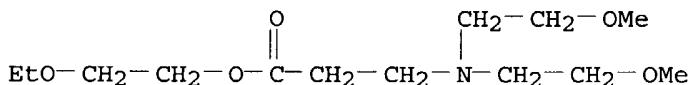
INDEX NAME)



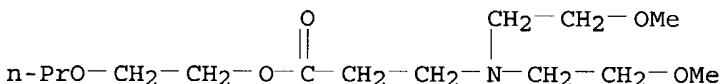
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CN β -Alanine, N,N-bis(2-methoxyethyl)-, 2-methoxyethyl ester (9CI) (CA
INDEX NAME)



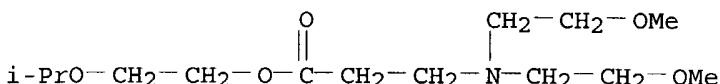
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INDEX NAME)



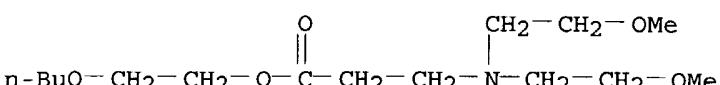
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CN β -Alanine, N,N-bis(2-methoxyethyl)-, 2-propoxyethyl ester (9CI) (CA
INDEX NAME)



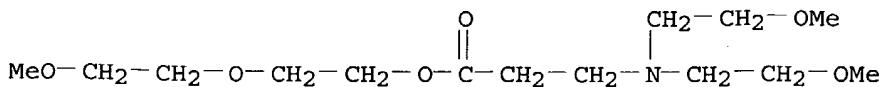
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CN β -Alanine, N,N-bis(2-methoxyethyl)-, 2-(1-methylethoxy)ethyl ester
(9CI) (CA INDEX NAME)



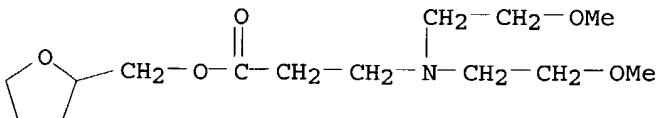
RN 473713-94-9 CAPLUS
CN β -Alanine, N,N-bis(2-methoxyethyl)-, 2-butoxyethyl ester (9CI) (CA
INDEX NAME)



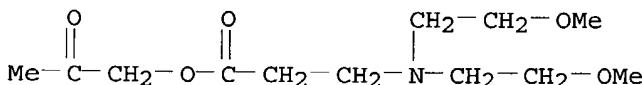
RN 473713-95-0 CAPLUS
CN β -Alanine, N,N-bis(2-methoxyethyl)-, 2-(2-methoxyethoxy)ethyl ester
(9CI) (CA INDEX NAME)



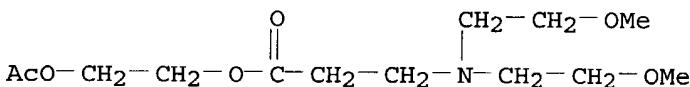
RN 473713-96-1 CAPLUS
 CN β -Alanine, N,N-bis(2-methoxyethyl)-, (tetrahydro-2-furanyl)methyl ester (9CI) (CA INDEX NAME)



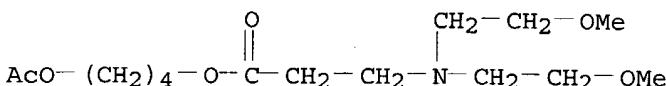
RN 473713-97-2 CAPLUS
 CN β -Alanine, N,N-bis(2-methoxyethyl)-, 2-oxopropyl ester (9CI) (CA INDEX NAME)



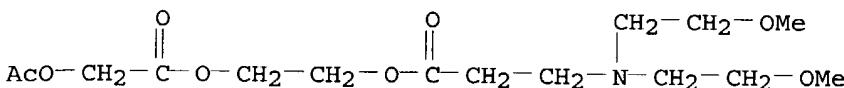
RN 473713-98-3 CAPLUS
 CN β -Alanine, N,N-bis(2-methoxyethyl)-, 2-(acetyloxy)ethyl ester (9CI) (CA INDEX NAME)



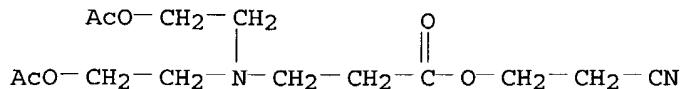
RN 473713-99-4 CAPLUS
 CN β -Alanine, N,N-bis(2-methoxyethyl)-, 4-(acetyloxy)butyl ester (9CI) (CA INDEX NAME)



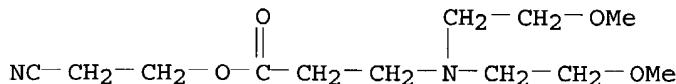
RN 473714-00-0 CAPLUS
 CN β -Alanine, N,N-bis(2-methoxyethyl)-, 2-[(acetyloxy)acetyl]oxyethyl ester (9CI) (CA INDEX NAME)



RN 473714-01-1 CAPLUS
 CN β -Alanine, N,N-bis(2-methoxyethyl)-, 2-[(1,1-dimethylethoxy)carbonyl]oxyethyl ester (9CI) (CA INDEX NAME)

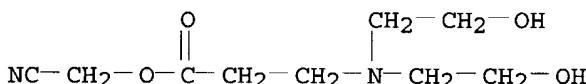


RN 449165-79-1 CAPLUS
 CN β -Alanine, N,N-bis(2-methoxyethyl)-, 2-cyanoethyl ester (9CI) (CA
 INDEX NAME)

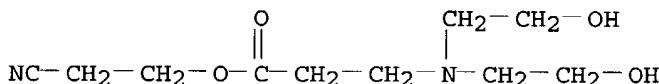


IT 449165-61-1P 449165-71-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or
 engineered material use); PREP (Preparation); RACT (Reactant or reagent);
 USES (Uses)
 (amine compds. and photoresist compns. for patterning
 process)

RN 449165-61-1 CAPLUS
 CN β -Alanine, N,N-bis(2-hydroxyethyl)-, cyanomethyl ester (9CI) (CA
 INDEX NAME)

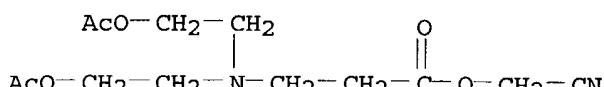


RN 449165-71-3 CAPLUS
 CN β -Alanine, N,N-bis(2-hydroxyethyl)-, 2-cyanoethyl ester (9CI) (CA
 INDEX NAME)

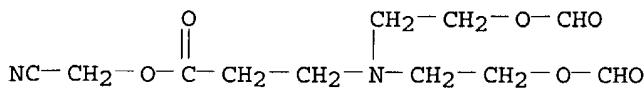


IT 449165-62-2P 449165-63-3P 449165-66-6P
 449165-67-7P 449165-77-9P 449165-81-5P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (amine compds. and photoresist compns. for patterning
 process)

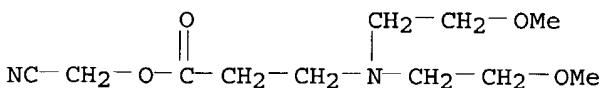
RN 449165-62-2 CAPLUS
 CN β -Alanine, N,N-bis[2-(acetoxy)ethyl]-, cyanomethyl ester (9CI) (CA
 INDEX NAME)



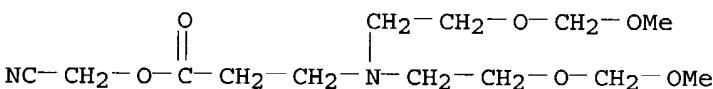
RN 449165-63-3 CAPLUS
 CN β -Alanine, N,N-bis[2-(formyloxy)ethyl]-, cyanomethyl ester (9CI) (CA
 INDEX NAME)



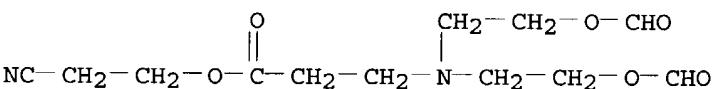
RN 449165-66-6 CAPLUS
 CN β -Alanine, N,N-bis(2-methoxyethyl)-, cyanomethyl ester (9CI) (CA INDEX NAME)



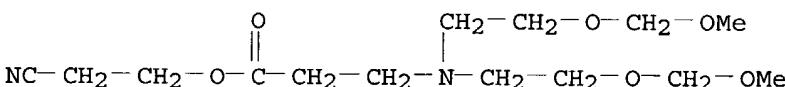
RN 449165-67-7 CAPLUS
 CN β -Alanine, N,N-bis[2-(methoxymethoxy)ethyl]-, cyanomethyl ester (9CI) (CA INDEX NAME)



RN 449165-77-9 CAPLUS
 CN β -Alanine, N,N-bis[2-(formyloxy)ethyl]-, 2-cyanoethyl ester (9CI) (CA INDEX NAME)



RN 449165-81-5 CAPLUS
 CN β -Alanine, N,N-bis[2-(methoxymethoxy)ethyl]-, 2-cyanoethyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:523645 CAPLUS
 DN 135:129564
 TI Chemically amplified resist composition containing
 amine derivative having carbonyl group, ester group, or carbonate group
 IN Hatakeyama, Jun; Osawa, Yoichi; Watanabe, Takeshi
 PA Shin-Etsu Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 37 pp.
 CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001194776	A2	20010719	JP 2000-328131	20001027
	US 6673511	B1	20040106	US 2000-697921	20001027
	US 2004106063	A1	20040603	US 2003-615683	20030709
PRAI	JP 1999-308496	A	19991029		

my
parent

US 2000-697921 A3 20001027

OS MARPAT 135:129564

AB The chemical amplified resist composition contains amine compound N(X)n(Y)3-n
(n =

1-3, integer; X = -R1-O-R2-, -R1-C(=O)-O-R61; R1 = C1-5 alkylene; R2 = C1-20 alkyl containing carbonyl or ester group; R61 = carbonyl, ester, ether, etc.; Y = H, C1-20 alkyl). The composition, which contains the aforementioned amine having carbonyl group, ester group, or carbonate group, generates little post exposure delay (PED) problem and provides the good acid diffusion control.

IT 58285-88-4

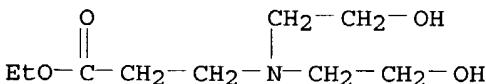
RL: RCT (Reactant); RACT (Reactant or reagent)

(chemical amplified resist composition containing amine having carbonyl group,

ester group, or carbonate group)

RN 58285-88-4 CAPLUS

CN β -Alanine, N,N-bis(2-hydroxyethyl)-, ethyl ester (9CI) (CA INDEX NAME)



IT 117789-12-5P 118480-08-3P 350684-62-7P
350684-64-9P 350684-66-1P 350684-68-3P
350684-69-4P 350684-70-7P 350684-71-8P
350684-72-9P 350684-73-0P 350684-74-1P
350684-75-2P 350684-78-5P 350684-79-6P
350684-80-9P 350684-81-0P

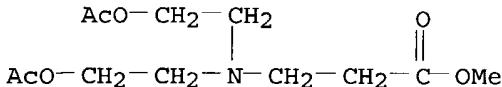
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chemical amplified resist composition containing amine having carbonyl group,

ester group, or carbonate group)

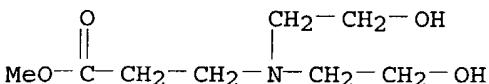
RN 117789-12-5 CAPLUS

CN β -Alanine, N,N-bis[2-(acetoxy)ethyl]-, methyl ester (9CI) (CA INDEX NAME)



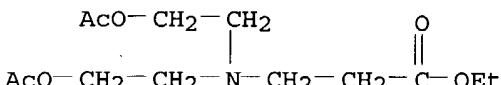
RN 118480-08-3 CAPLUS

CN β -Alanine, N,N-bis(2-hydroxyethyl)-, methyl ester (9CI) (CA INDEX NAME)

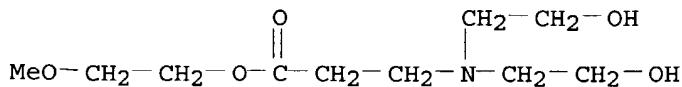


RN 350684-62-7 CAPLUS

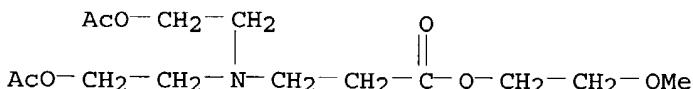
CN β -Alanine, N,N-bis[2-(acetoxy)ethyl]-, ethyl ester (9CI) (CA INDEX NAME)



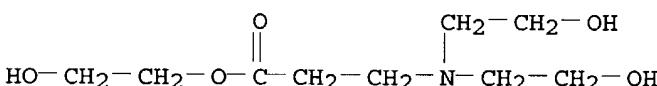
RN 350684-64-9 CAPLUS
CN β -Alanine, N,N-bis(2-hydroxyethyl)-, 2-methoxyethyl ester (9CI) (CA INDEX NAME)



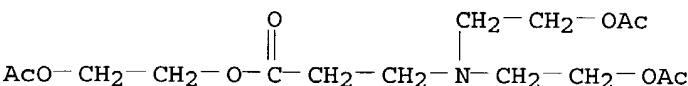
RN 350684-66-1 CAPLUS
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 2-methoxyethyl ester (9CI) (CA INDEX NAME)



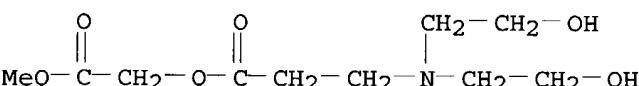
RN 350684-68-3 CAPLUS
CN β -Alanine, N,N-bis(2-hydroxyethyl)-, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)



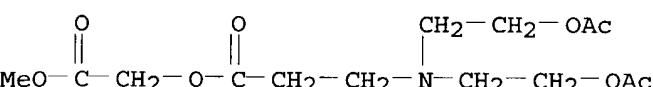
RN 350684-69-4 CAPLUS
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 2-(acetyloxy)ethyl ester (9CI) (CA INDEX NAME)



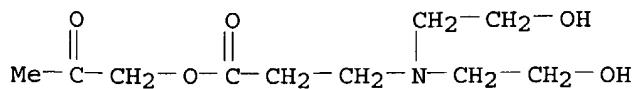
RN 350684-70-7 CAPLUS
CN β -Alanine, N,N-bis(2-hydroxyethyl)-, 2-methoxy-2-oxoethyl ester (9CI) (CA INDEX NAME)



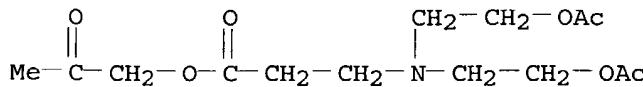
RN 350684-71-8 CAPLUS
CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 2-methoxy-2-oxoethyl ester (9CI) (CA INDEX NAME)



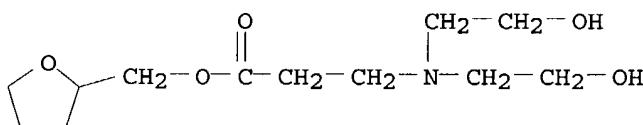
RN 350684-72-9 CAPLUS
CN β -Alanine, N,N-bis(2-hydroxyethyl)-, 2-oxopropyl ester (9CI) (CA INDEX NAME)



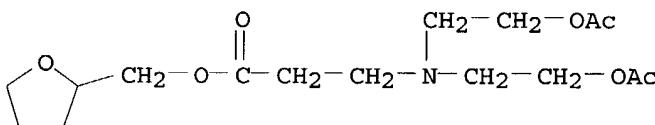
RN 350684-73-0 CAPLUS
 CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, 2-oxopropyl ester (9CI) (CA INDEX NAME)



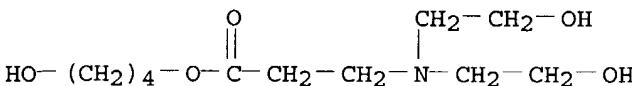
RN 350684-74-1 CAPLUS
 CN β -Alanine, N,N-bis(2-hydroxyethyl)-, (tetrahydro-2-furanyl)methyl ester (9CI) (CA INDEX NAME)



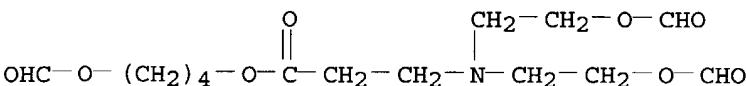
RN 350684-75-2 CAPLUS
 CN β -Alanine, N,N-bis[2-(acetyloxy)ethyl]-, (tetrahydro-2-furanyl)methyl ester (9CI) (CA INDEX NAME)



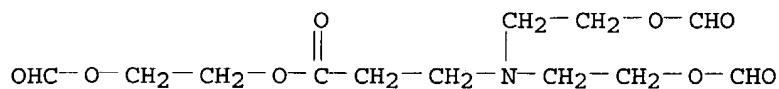
RN 350684-78-5 CAPLUS
 CN β -Alanine, N,N-bis(2-hydroxyethyl)-, 4-hydroxybutyl ester (9CI) (CA INDEX NAME)



RN 350684-79-6 CAPLUS
 CN β -Alanine, N,N-bis[2-(formyloxy)ethyl]-, 4-(formyloxy)butyl ester (9CI) (CA INDEX NAME)

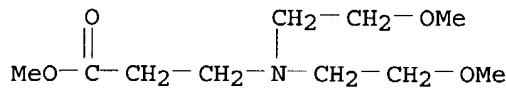


RN 350684-80-9 CAPLUS
 CN β -Alanine, N,N-bis[2-(formyloxy)ethyl]-, 2-(formyloxy)ethyl ester (9CI) (CA INDEX NAME)



RN 350684-81-0 CAPLUS

CN β -Alanine, N,N-bis(2-methoxyethyl)-, methyl ester (9CI) (CA INDEX
NAME)



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L9 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:831831 CAPLUS
 DN 137:325160
 TI Preparation of novel tertiary amine compounds having an ester structure as additives for chemical amplification resists
 IN Watanabe, Takeru; Hasegawa, Koji; Kinsho, Takeshi; Hatakeyama, Jun
 PA Shin-Etsu Chemical Co., Ltd., Japan
 SO Eur. Pat. Appl., 31 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1253138	A2	20021030	EP 2002-252827	20020423
	EP 1253138	A3	20030924		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2002193622	A1	20021219	US 2002-127120	20020422
	JP 2003012621	A2	20030115	JP 2002-120468	20020423
PRAI	JP 2001-123927	A	20010423		
OS	MARPAT 137:325160				

L9 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:523645 CAPLUS
 DN 135:129564
 TI Chemically amplified resist composition containing amine derivative having carbonyl group, ester group, or carbonate group
 IN Hatakeyama, Jun; Osawa, Yoichi; Watanabe, Takeshi
 PA Shin-Etsu Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 37 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001194776	A2	20010719	JP 2000-328131	20001027
	US 6673511	B1	20040106	US 2000-697921	20001027
	US 2004106063	A1	20040603	US 2003-615683	20030709
PRAI	JP 1999-308496	A	19991029		
	US 2000-697921	A3	20001027		
OS	MARPAT 135:129564				

=>

L9 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:831831 CAPLUS
DN 137:325160
TI Preparation of novel tertiary amine compounds having an ester structure as additives for chemical amplification resists
IN Watanabe, Takeru; Hasegawa, Koji; Kinsho, Takeshi; Hatakeyama, Jun
PA Shin-Etsu Chemical Co., Ltd., Japan
SO Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1253138	A2	20021030	EP 2002-252827	20020423
	EP 1253138	A3	20030924		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2002193622	A1	20021219	US 2002-127120	20020422
	JP 2003012621	A2	20030115	JP 2002-120468	20020423

PRAI JP 2001-123927 A 20010423

OS MARPAT 137:325160

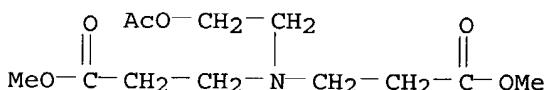
AB The invention provides novel and useful ester group-containing tertiary amine compds. $(R_1OCH_2CH_2)_nN(CH_2CH_2CO_2R_2)^{3-n}$ [n is 1 or 2; R₁, R₂ = (cyclo)alkyl groups which may contain an ether, carbonyl or carboxyloxy group] which, when used as additives in chemical amplification photolithog., can yield photoresists having a high resolution and an excellent focus margin. Thus, a mixture of 10.5 g each Et acrylate and diethanolamine was allowed to stand 20 h at 20-30 °C, 25.6 g triethylamine, 100 mg 4-dimethylaminopyridine, 100 g THF, and 22.4 g of acetic anhydride were added and the mixture stirred for 10 h to afford 95 % $(AcOCH_2CH_2)NCH_2CH_2CO_2Et$. The photoresists prepared by adding the ester group-containing tertiary amine compds. of the invention have a much wider focus margin, as compared with conventional photoresists.

IT 350684-82-1P 350684-83-2P 350684-85-4P
473714-03-3P 473714-04-4P 473714-05-5P
473714-06-6P 473714-07-7P 473714-08-8P
473714-09-9P 473714-10-2P 473714-11-3P
473714-12-4P 473714-13-5P 473714-14-6P
473714-15-7P 473714-16-8P 473714-17-9P
473714-18-0P 473714-19-1P 473714-20-4P
473714-21-5P 473714-22-6P 473714-23-7P
473714-24-8P

RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation of acrylate-(di)ethanolamine adducts as additives for chemical amplification resists)

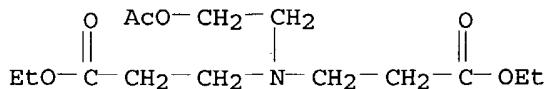
RN 350684-82-1 CAPLUS

CN β -Alanine, N-[2-(acetyloxy)ethyl]-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



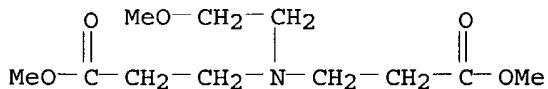
RN 350684-83-2 CAPLUS

CN β -Alanine, N-[2-(acetyloxy)ethyl]-N-(3-ethoxy-3-oxopropyl)-, ethyl ester (9CI) (CA INDEX NAME)



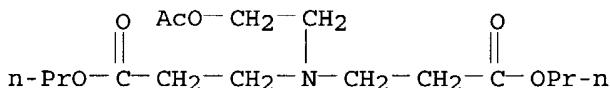
RN 350684-85-4 CAPLUS

CN β -Alanine, N-(2-methoxyethyl)-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



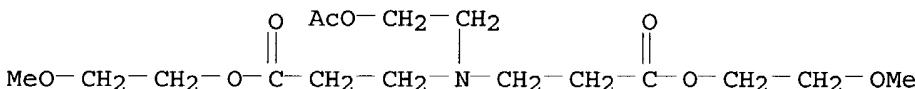
RN 473714-03-3 CAPLUS

CN β -Alanine, N-[2-(acetoxy)ethyl]-N-(3-oxo-3-propoxypropyl)-, propyl ester (9CI) (CA INDEX NAME)



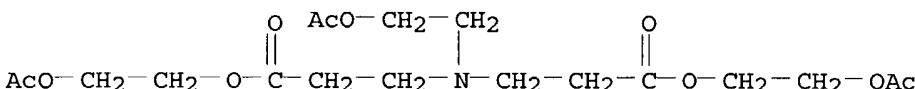
RN 473714-04-4 CAPLUS

CN β -Alanine, N-[2-(acetyloxy)ethyl]-N-[3-(2-methoxyethoxy)-3-oxopropyl]-2-methoxyethyl ester (9CI) (CA INDEX NAME)



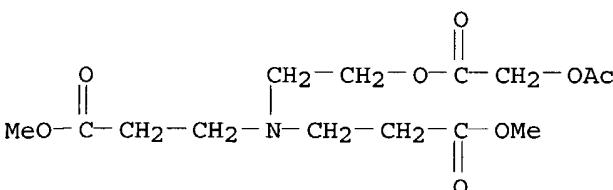
RN 473714-05-5 CAPLUS

CN β -Alanine, N-[3-[2-(acetyloxy)ethoxy]-3-oxopropyl]-N-[2-(acetyloxy)ethyl]-, 2-(acetyloxy)ethyl ester (9CI) (CA INDEX NAME)



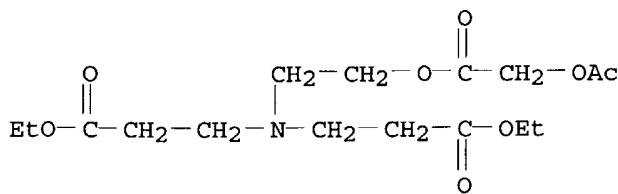
RN 473714-06-6 CAPLUS

CN β -Alanine, N-[2-[(acetyloxy)acetyl]oxylethyl]-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)

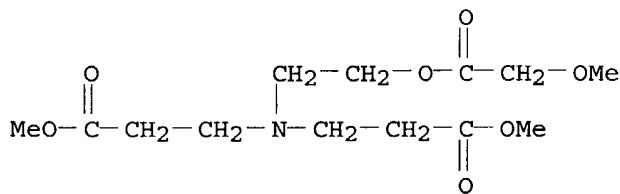


RN 473714-07-7 CAPLUS

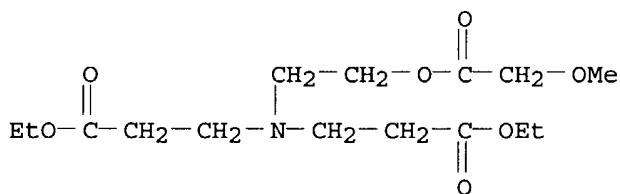
CN β -Alanine, N-[2-[(acetyloxy)acetyl]oxylethyl]-N-(3-ethoxy-3-oxopropyl)-, ethyl ester (9CI) (CA INDEX NAME)



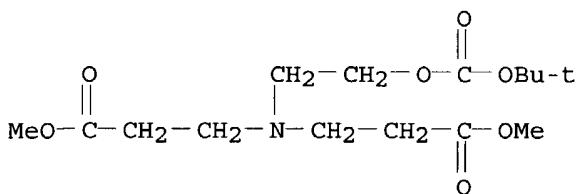
RN 473714-08-8 CAPLUS
 CN β -Alanine, N-[2-[(methoxyacetyl)oxy]ethyl]-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



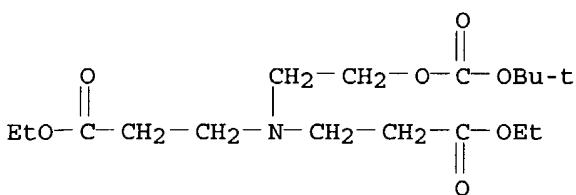
RN 473714-09-9 CAPLUS
 CN β -Alanine, N-(3-ethoxy-3-oxopropyl)-N-[2-[(methoxyacetyl)oxy]ethyl]-, ethyl ester (9CI) (CA INDEX NAME)



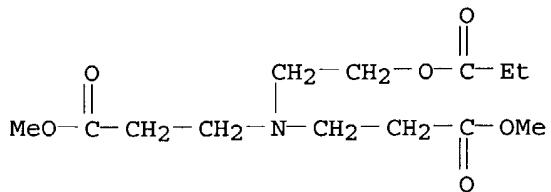
RN 473714-10-2 CAPLUS
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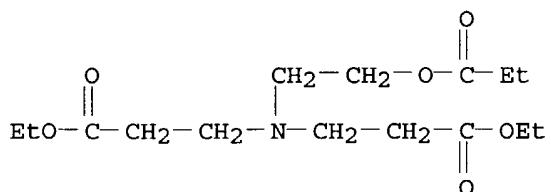
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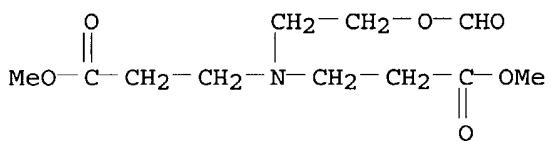
RN 473714-12-4 CAPLUS
 CN β -Alanine, N-(3-methoxy-3-oxopropyl)-N-[2-(1-oxoproxy)ethyl]-, methyl ester (9CI) (CA INDEX NAME)



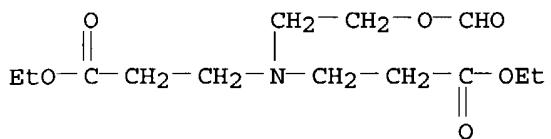
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 CN β -Alanine, N-(3-ethoxy-3-oxopropyl)-N-[2-(1-oxoproxy)ethyl]-, ethyl ester (9CI) (CA INDEX NAME)



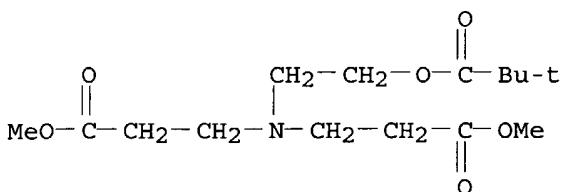
RN 473714-14-6 CAPLUS
 CN β -Alanine, N-[2-(formyloxy)ethyl]-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



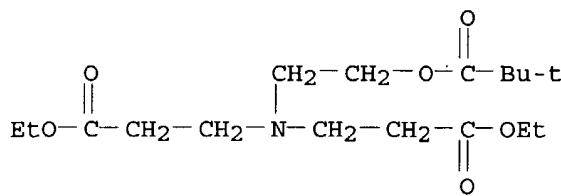
RN 473714-15-7 CAPLUS
 CN β -Alanine, N-(3-ethoxy-3-oxopropyl)-N-[2-(formyloxy)ethyl]-, ethyl ester (9CI) (CA INDEX NAME)



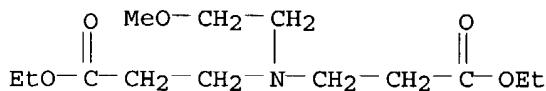
RN 473714-16-8 CAPLUS
 CN β -Alanine, N-[2-(2,2-dimethyl-1-oxoproxy)ethyl]-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



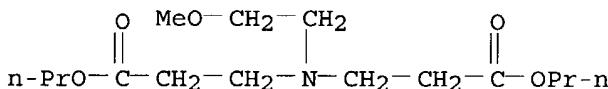
RN 473714-17-9 CAPLUS
 CN β -Alanine, N-[2-(2,2-dimethyl-1-oxopropoxy)ethyl]-N-(3-ethoxy-3-oxopropyl)-, ethyl ester (9CI) (CA INDEX NAME)



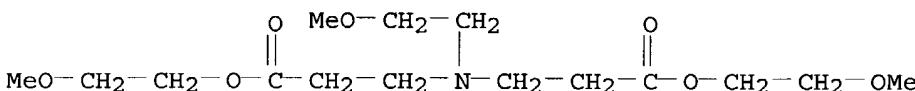
RN 473714-18-0 CAPLUS
 CN β -Alanine, N-(3-ethoxy-3-oxopropyl)-N-(2-methoxyethyl)-, ethyl ester (9CI) (CA INDEX NAME)



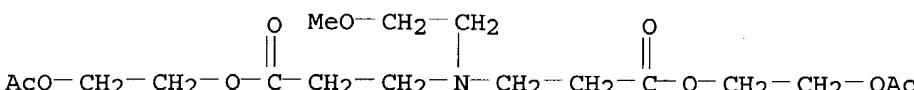
RN 473714-19-1 CAPLUS
 CN β -Alanine, N-(2-methoxyethyl)-N-(3-oxo-3-propoxypropyl)-, propyl ester (9CI) (CA INDEX NAME)



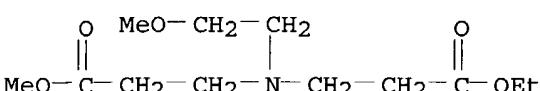
RN 473714-20-4 CAPLUS
 CN β -Alanine, N-[3-(2-methoxyethoxy)-3-oxopropyl]-N-(2-methoxyethyl)-, 2-methoxyethyl ester (9CI) (CA INDEX NAME)



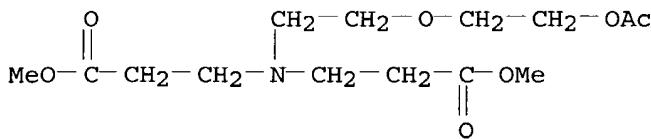
RN 473714-21-5 CAPLUS
 CN β -Alanine, N-[3-[2-(acetoxy)ethoxy]-3-oxopropyl]-N-(2-methoxyethyl)-, 2-(acetoxy)ethyl ester (9CI) (CA INDEX NAME)



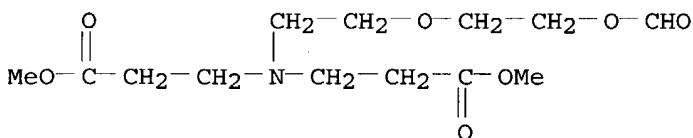
RN 473714-22-6 CAPLUS
 CN β -Alanine, N-(3-ethoxy-3-oxopropyl)-N-(2-methoxyethyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 473714-23-7 CAPLUS
CN β -Alanine, N-[2-[2-(acetyloxy)ethoxy]ethyl]-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 473714-24-8 CAPLUS
CN β -Alanine, N-[2-[2-(formyloxy)ethoxy]ethyl]-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:523645 CAPLUS
DN 135:129564
TI Chemically amplified resist composition containing amine derivative having carbonyl group, ester group, or carbonate group
IN Hatakeyama, Jun; Osawa, Yoichi; Watanabe, Takeshi
PA Shin-Etsu Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 37 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001194776	A2	20010719	JP 2000-328131	20001027
	US 6673511	B1	20040106	US 2000-697921	20001027
	US 2004106063	A1	20040603	US 2003-615683	20030709
PRAI	JP 1999-308496	A	19991029		
	US 2000-697921	A3	20001027		

OS MARPAT 135:129564

AB The chemical amplified resist composition contains amine compound N(X)n(Y)3-n
(n =

1-3, integer; X = -R1-O-R2-, -R1-C(=O)-O-R61; R1 = C1-5 alkylene; R2 = C1-20 alkyl containing carbonyl or ester group; R61 = carbonyl, ester, ether, etc.; Y = H, C1-20 alkyl). The composition, which contains the aforementioned amine having carbonyl group, ester group, or carbonate group, generates little post exposure delay (PED) problem and provides the good acid diffusion control.

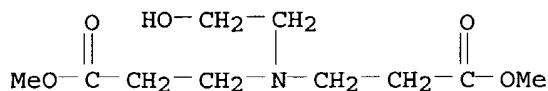
IT 85997-58-6P 87278-81-7P 144576-44-3P
350684-82-1P 350684-83-2P 350684-84-3P
350684-85-4P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(chemical amplified resist composition containing amine having carbonyl group,

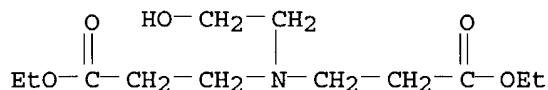
ester group, or carbonate group)

RN 85997-58-6 CAPLUS

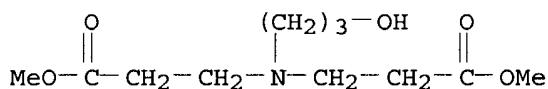
CN β -Alanine, N-(2-hydroxyethyl)-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



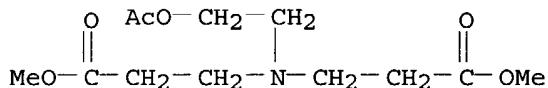
RN 87278-81-7 CAPLUS
 CN β -Alanine, N-(3-ethoxy-3-oxopropyl)-N-(2-hydroxyethyl)-, ethyl ester
 (9CI) (CA INDEX NAME)



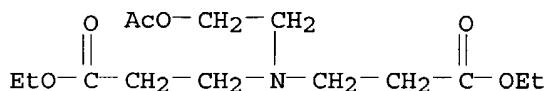
RN 144576-44-3 CAPLUS
 CN β -Alanine, N-(3-hydroxypropyl)-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



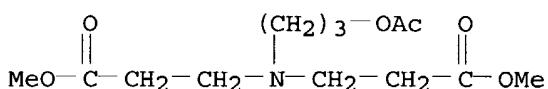
RN 350684-82-1 CAPLUS
 CN β -Alanine, N-[2-(acetyloxy)ethyl]-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



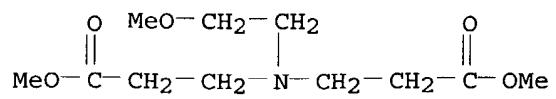
RN 350684-83-2 CAPLUS
 CN β -Alanine, N-[2-(acetyloxy)ethyl]-N-(3-ethoxy-3-oxopropyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 350684-84-3 CAPLUS
 CN β -Alanine, N-[3-(acetyloxy)propyl]-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 350684-85-4 CAPLUS
 CN β -Alanine, N-(2-methoxyethyl)-N-(3-methoxy-3-oxopropyl)-, methyl ester (9CI) (CA INDEX NAME)



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